

What is claimed is:

1. A method of supporting a flexible substrate, comprising the step of:
fixing the flexible substrate having thermal shrinkage to a holding frame
having a smaller thermal expansion coefficient than 10 ppm/°C.
2. A method of supporting a flexible substrate, comprising the step of:
fixing an outer circumference of the flexible substrate having thermal
shrinkage to a frame-shaped holding frame having a smaller thermal expansion coefficient
than 10 ppm/°C.
3. A method of supporting a flexible substrate according to claim 1, wherein the
flexible substrate comprises one selected from polyethylene naphthalate, polyethylene
terephthalate, polyether sulfone, and polyimide.
4. A method of supporting a flexible substrate according to claim 1, wherein the
holding frame comprises ceramics-metal complex.
5. A method of supporting a flexible substrate according to claim 2, wherein the
flexible substrate comprises one selected from polyethylene naphthalate, polyethylene
terephthalate, polyether sulfone, and polyimide.
6. A method of supporting a flexible substrate according to claim 2, wherein the
holding frame comprises ceramics-metal complex.

7. A method of manufacturing a semiconductor device, comprising the step of:

fixing a flexible substrate having thermal shrinkage to a holding frame having a smaller thermal expansion coefficient than $10 \text{ ppm}/^{\circ}\text{C}$; and

heating the flexible substrate at a temperature that the flexible substrate is thermal-shrunk by 0.2% or more.

8. A method of manufacturing a semiconductor device, comprising the step of:

fixing an outer circumference of a flexible substrate having thermal shrinkage to a frame-shaped holding frame having a smaller thermal expansion coefficient than $10 \text{ ppm}/^{\circ}\text{C}$ and; and

heating the flexible substrate at a temperature that the flexible substrate is thermal-shrunk by 0.2% or more.

9. A method of manufacturing a semiconductor device, comprising the step of:

fixing an outer circumference of a flexible substrate having thermal shrinkage to a frame-shaped holding frame having a smaller thermal expansion coefficient than $10 \text{ ppm}/^{\circ}\text{C}$;

heating the fixed flexible substrate at a temperature that the flexible substrate is thermal-shrunk by 0.2% or more; and

forming a conductive film on the flexible substrate by a sputtering method.

10. A method of manufacturing a semiconductor device, comprising the step of:

fixing an outer circumference of a flexible substrate having thermal shrinkage to a frame-shaped holding frame having a smaller thermal expansion coefficient than $10 \text{ ppm}/^{\circ}\text{C}$

ppm/°C;

heating the fixed flexible substrate at a temperature that the flexible substrate is thermal-shrunk by 0.2% or more; and

forming an amorphous semiconductor film on the flexible substrate by a plasma CVD method.

11. A method of manufacturing a semiconductor device, comprising:

a first step of fixing an outer circumference of a flexible substrate having thermal shrinkage to a frame-shaped holding frame having a smaller thermal expansion coefficient than 10 ppm/°C and then heating the flexible substrate at a temperature that the flexible substrate is thermal-shrunk by 0.2% or more; and

a second step of forming a predetermined pattern over the flexible substrate by screen printing.

12. A method of manufacturing a semiconductor device, comprising:

a first step of fixing an outer circumference of a flexible substrate having thermal shrinkage to a frame-shaped holding frame having a smaller thermal expansion coefficient than 10 ppm/°C and then heating the flexible substrate at a temperature that the flexible substrate is thermal-shrunk by 0.2% or more; and

a second step of forming a predetermined pattern over the flexible substrate by laser processing.

13. A method of manufacturing a semiconductor device according to claim 11, wherein a position of the flexible substrate is aligned by an alignment means of the holding

frame in the second step.

14. A method of manufacturing a semiconductor device according to claim 12, wherein a position of the flexible substrate is aligned by an alignment means of the holding frame in the second step.

15. A method of manufacturing a semiconductor device according to claim 7, wherein the flexible substrate comprises one selected from polyethylene naphthalate, polyethylene terephthalate, polyether sulfon, and polyimide.

16. A method of manufacturing a semiconductor device according to claim 7, wherein the holding frame comprises ceramics-metal complex.

17. A method of manufacturing a semiconductor device according to claim 8, wherein the flexible substrate comprises one selected from polyethylene naphthalate, polyethylene terephthalate, polyether sulfon, and polyimide.

18. A method of manufacturing a semiconductor device according to claim 8, wherein the holding frame comprises ceramics-metal complex.

19. A method of manufacturing a semiconductor device according to claim 9, wherein the flexible substrate comprises one selected from polyethylene naphthalate, polyethylene terephthalate, polyether sulfon, and polyimide.

20. A method of manufacturing a semiconductor device according to claim 9, wherein the holding frame comprises ceramics-metal complex.

21. A method of manufacturing a semiconductor device according to claim 10, wherein the flexible substrate comprises one selected from polyethylene naphthalate, polyethylene terephthalate, polyether sulfon, and polyimide.

22. A method of manufacturing a semiconductor device according to claim 10, wherein the holding frame comprises ceramics-metal complex.

23. A method of manufacturing a semiconductor device according to claim 11, wherein the flexible substrate comprises one selected from polyethylene naphthalate, polyethylene terephthalate, polyether sulfon, and polyimide.

24. A method of manufacturing a semiconductor device according to claim 11, wherein the holding frame comprises ceramics-metal complex.

25. A method of manufacturing a semiconductor device according to claim 12, wherein the flexible substrate comprises one selected from polyethylene naphthalate, polyethylene terephthalate, polyether sulfon, and polyimide.

26. A method of manufacturing a semiconductor device according to claim 12, wherein the holding frame comprises ceramics-metal complex.